

wherein said treated solid oxide compound is produced by a process comprising contacting at least one solid oxide compound with at least one electron-withdrawing anion source compound; and

wherein said solid oxide compound is calcined before, during, or after contacting said electron-withdrawing anion source; and

wherein the activity of said catalyst composition is greater than 250 grams of polyethylene per gram of treated solid oxide compound per hour; and

wherein there is a substantial absence of aluminoxanes and organoborates.

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#### REMARKS

Claims 8 and 26-49 are currently pending in the present application. Applicant herewith affirms the telephone election of process claims 8 and 26-45 with traverse. Accordingly, claims 8 and 26-45 are currently under consideration; claims 46-49 have been withdrawn pursuant to 35 USC 121.

Claim 8 has been amended to replace the terms OMC-I and OMC-II with the generic groups defined by these terms. (See, e.g., pages 5-7 of the specification) Accordingly, it is respectfully submitted that no new matter issues are raised by this amendment.

In the Office Action, the Examiner requested duplicate copies of certain references in Applicant's IDS filed July 19, 2001. Applicant will provide those references shortly.

Claims 8 and 26-37 were rejected under 35 USC 112, second paragraph, as being indefinite. In particular, the Examiner asserted that the term "OMC-I" is indefinite

because this term includes exemplary species. Applicant traverses this rejection and respectfully submits that one of ordinary skill in the art would have no difficulty understanding the meets and bounds of the claimed subject matter.

The inclusion of species in a Markush group does not, *per se*, render a term indefinite. (See MPEP 2173.05(h)) However, to advance prosecution, Applicant has amended claim 8 by replacing the terms OMC-I and OMC-II with the generic groups disclosed in the specification. Accordingly, reconsideration and withdrawal of the rejection are respectfully solicited.

Claims 8 and 26-45 were rejected under obviousness-type double patenting as allegedly being unpatentable over claims 1-24 of U.S. Patent No. 6,316,553. In particular, it was argued that since the patented claims do not require aluminoxanes and organoborates, the instant claims are not patentably distinct from those already patented. Applicant respectfully traverses the rejection and responds as follows.

It appears from the Examiner's reasoning that since the patented claims do not contain a specific limitation to include co-catalysts, then the present species claim which excludes such co-catalysts are patentably indistinguishable. The Examiner, however, provides no evidence to support this conclusion. Accordingly, clarification or withdrawal of the rejection is respectfully solicited.

Attached hereto is a marked-up version of the changes made to the specification and the claims by the current amendment. The attached page is captioned "**VERSION WITH MARKINGS TO SHOW CHANGES MADE**".

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this

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paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

A handwritten signature in cursive script, appearing to read "Daniel Bucca".

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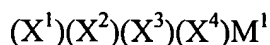
**VERSION WITH MARKINGS TO SHOW CHANGES MADE****IN THE CLAIMS**

Claim 8 has been amended as follows:

8. (Twice Amended) A process of using a catalyst composition to polymerize at least one monomer to produce a polymer, said process comprising contacting said catalyst composition and at least one monomer in a polymerization zone under polymerization conditions to produce said polymer;

wherein said catalyst composition is produced by a process comprising contacting at least one organometal compound, at least one treated solid oxide compound, and at least one organoaluminum compound to produce said catalyst composition,

wherein said organometal compound has the following general formula



wherein  $M^1$  is selected from the group consisting of titanium, zirconium, and hafnium, and

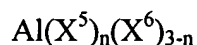
wherein  $(X^1)$  is independently selected from the group consisting of cyclopentadienyls, indenyls, fluorenyls, substituted cyclopentadienyls, substituted indenyls, and substituted fluorenyls, and

wherein substituents on said substituted cyclopentadienyls, substituted indenyls, and substituted fluorenyls are selected from the group consisting of aliphatic groups, cyclic groups, combinations of aliphatic and cyclic groups, and organometallic groups, and hydrogen; and

wherein (X<sup>3</sup>) and (X<sup>4</sup>) are independently selected from the group consisting of halides, aliphatic groups, cyclic groups, combinations of aliphatic and cyclic groups, and organometallic groups, and

wherein (X<sup>2</sup>) is selected from the group consisting of [Group OMC-I] cyclopentadienyls, indenyls, fluorenyls, substituted cyclopentadienyls, substituted indenyls, [or Group OMC-II] halides, aliphatic groups, cyclic groups, combinations of aliphatic and cyclic groups and organometallic groups, and

wherein said organoaluminum compound has the following general formula,



wherein (X<sup>5</sup>) is a hydrocarbyl having from 1-20 carbon atoms, and

wherein (X<sup>6</sup>) is a halide, hydride, or alkoxide, and

wherein "n" is a number from 1 to 3 inclusive;

wherein said treated solid oxide compound is produced by a process comprising contacting at least one solid oxide compound with at least one electron-withdrawing anion source compound; and

wherein said solid oxide compound is calcined before, during, or after contacting said electron-withdrawing anion source; and

wherein the activity of said catalyst composition is greater than 250 grams of polyethylene per gram of treated solid oxide compound per hour; and

wherein there is a substantial absence of aluminoxanes and organoborates.